

RECEIVED  
CENTRAL FAX CENTER  
AUG 21 2007

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings in the application:

1-16. (Cancelled)

17. (Currently amended) A method of simultaneously detecting or quantifying a plurality of different target nucleic acids  $(N1, N2, \dots, Nn)(Fa, Sa)$  each having a predetermined first partial sequence  $[[F]]Fa$  and a predetermined second partial sequence  $[[S]]Sa$ , wherein  $Fa$  are  $[F1, F2, \dots, Fn]$ ;  $Sa$  are  $[S1, S2, \dots, Sn]$ ; and  $(Fa, Sa)$  are  $[(F1, S1), (F2, S2), \dots, (Fn, Sn)]$ , in a specimen comprising:

(a) preparing probes  $Aa [A1, A2, \dots, An]$  and probes  $Ba [B1, B2, \dots, Bn]$  to convert target nucleic acids  $(Fa, Sa)$  into flag sequences  $(D0j, D1k)$  ( $a, j$  and  $k$  are arbitrary natural numbers;  $a_{max} = n$ ;  $j_{max}$  and  $k_{max} \geq n$ ), wherein  $Aa$  are  $[A1, A2, \dots, An]$  and  $Ba$  are  $[B1, B2, \dots, Bn]$ ,

said probes  $Aa [A1, A2, \dots, An]$  being respective first probes each of which has a sequence  $F'a [F'1, F'2, \dots, F'n]$  complementary to the respective first partial sequence  $Fa [F1, F2, \dots, Fn]$  of the target nucleic acid  $Nn (N1, N2, \dots, Nn)(Fa, Sa)$  and a first binding molecule bound to the sequence  $F'a$ , wherein  $F'a$  are  $[F'1, F'2, \dots, F'n]$ , and

said probes  $Ba [B1, B2, \dots, Bn]$  being respective second probes each of which has a sequence  $S'a [S'1, S'2, \dots, S'n]$  complementary to the respective second partial sequence  $Sa [S1, S2, \dots, Sn]$  of the target nucleic acid and a flag bound to the sequence  $S'a$ , wherein said flag comprises four units  $SD, D0j, D1k$ , and  $ED$ , each having a desired sequence, and linked in the form of  $SD + D0j + D1k + ED$ ; wherein the flag sequences  $D0j$  and  $D1k$  are located between  $SD$  and  $ED$  and a combination of the  $D0j$  and  $D1k$  ( $D0j, D1k$ ) being assigned respectively to the target nucleic acids  $(Fa, Sa)$ ; and wherein  $SD$  and  $ED$  are each primer sequences, wherein  $S'a$  are  $[S'1, S'2, \dots, S'n]$ , and wherein  $j$  and  $k$  are arbitrary natural numbers,

(b) mixing the probes  $Aa [A1, A2, \dots, An]$  and the probes  $Ba [B1, B2, \dots, Bn]$  with specimens containing target nucleic acids  $(Fa, Sa) [F1, S1], (F1, S1), \dots, (Fn, Sn)]$  respectively, thereby hybridizing the first probes  $Aa [A1, A2, \dots, An]$  with the respective first partial sequences  $Fa [F1, F2, \dots, Fn]$  of the target nucleic acids and simultaneously hybridizing the second probes  $Ba [B1, B2, \dots, Bn]$  with the respective second partial sequence  $Sa [S1, S2, \dots, Sn]$  of the target nucleic acids;

- (c) ligating the first probes Aa and the second probes Ba, both being hybridized with the target nucleic acids (Fa, Sa), thereby obtaining probes (Aa+Ba);
- (d) binding the first binding molecules of probe Aa to substances capable of being paired up therewith, thereby recovering the probes (Aa+Ba);
- (e) dissociating the flag sequences (D0j, D1k);
- (f) amplifying the flag sequences (D0j, D1k) by PCR, wherein the PCR uses a primer to which a marker substance is bound, and thereby obtaining the flag sequences (D0j, D1k) to which the marker substance is bound; and
- (g) detecting or quantifying the marker substance of the flag sequences (D0j, D1k), thereby detecting or quantifying the target nucleic acids (Fa, Sa).

18. (Cancelled)

19. (Currently amended) The method according to claim 17, wherein step ~~(e)~~(e) further comprises:

~~(f-1)~~ amplifying the dissociated flag sequences (D0j, D1k) by PCR,

wherein the PCR uses a primer to which a second binding molecule is bound, and thereby obtains the flag sequences (D0j, D1k) to which the second binding molecule is bound:

~~(f-2)~~ binding the second binding molecules of the flag sequences (D0j, D1k) to substances capable of being paired up therewith, thereby recovering the flag sequences (D0j, D1k); and

~~(f-3)~~ amplifying the recovered flag sequences (D0j, D1k) by PCR,

~~wherein the PCR uses a primer to which a marker substance is bound, and thereby obtains the flag sequences (D0j, D1k) to which the marker substance is bound.~~

20-21. (Cancelled)

22. (Previously presented) The method according to claim 17, wherein, in said step (d), said substance capable of being paired up with the first binding molecules are immobilized on beads such that the probes (Aa, Ba) are recovered by binding the probe (Aa, Ba) to the beads via the first binding molecules.

23. (Previously presented) The method according to claim 17, wherein said marker substance is a fluorescent substance such that the target nucleic acids are detected or quantified by quantifying the fluorescent substance.

24. (Cancelled)

25. (Previously presented) The method according to claim 17, wherein said flag sequences (D0j, D1k) are double stranded sequences.

26-33. (Cancelled)